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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/823,564	04/14/2004	Naoto Yajima	251850US0	4824
22850	7590 03/23/2006		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			FALASCO, LOUIS V	
1940 DUKE ALEXANDE	STREET RIA, VA 22314		ART UNIT	PAPER NUMBER
	,		1773	" <del>"</del> • • •
			DATE MAILED: 03/23/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
	10/823,564	YAJIMA ET AL.	
Office Action Summary	Examiner	Art Unit	
•	. Louis Falasco	1773	
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet wi	th the correspondence address	•
A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING I  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC .136(a). In no event, however, may a red d will apply and will expire SIX (6) MON te, cause the application to become AB	CATION.  Leply be timely filed  ITHS from the mailing date of this communicat  ANDONED (35 U.S.C. § 133).	
Status		·	
1)⊠ Responsive to communication(s) filed on 11/0	09/05 and Supplemental 1/0	<u>03/06</u> .	
2a)⊠ This action is <b>FINAL</b> . 2b)□ Th	is action is non-final.	·	
3) Since this application is in condition for allows	ance except for formal matte	ers, prosecution as to the merits	is
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D	. 11, 453 O.G. 213.	
Disposition of Claims		•	
4)⊠ Claim(s) <u>1-9</u> is/are pending in the application.	•		
4a) Of the above claim(s) is/are withdra	•		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-8</u> is/are rejected.			
7)⊠ Claim(s) 9 is/are objected to.	•	·	
8) Claim(s) are subject to restriction and/	or election requirement.		
	o. o.o		•
Application Papers		•	
9)☐ The specification is objected to by the Examin	ner.		
10) The drawing(s) filed on is/are: a) ac	cepted or b) objected to t	by the Examiner.	
Applicant may not request that any objection to the	e drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the corre	ction is required if the drawing(	s) is objected to. See 37 CFR 1.12	1(d).
11) ☐ The oath or declaration is objected to by the E	Examiner. Note the attached	Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12)⊠ Acknowledgment is made of a claim for foreig a)⊠ All b)□ Some * c)□ None of:		119(a)-(d) or (f).	
1. Certified copies of the priority documer			
2. Certified copies of the priority documer	•	· ·	
3. Copies of the certified copies of the pri	•	received in this National Stage	
application from the International Burea	, , , , , , , , , , , , , , , , , , , ,		
* See the attached detailed Office action for a lis	st of the certified copies not	received.	
Attachment(s)			
1)		ummary (PTO-413) )/Mail Date	
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date</li> </ol>		formal Patent Application (PTO-152)	

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## PAPERS RECEIVED

The Amendment to the specification and claims and filed 11/09/05 and Supplemental Amendment 1/03/06 are acknowledged.

#### **CLAIMS**

The claims are: 1 to 9 all claims remain under consideration.

#### **DETAILED ACTION**

Statutory Basis

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Rejections

1. Claims 1 to 8 are rejected under 35 U.S.C. 102(a or b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over any of: Lowery et al (US 6818298), Katsutoshi et al (JP 11-031322), Shigeo et al (JP 09-185822), Matsuno (2201-84549).

Lowery et al, Katsutoshi et al, Shigeo et al, Matsuno are applied for reasons of record. Though not measuring concavity concentration, all of Lowery et al, Katsutoshi et al, Shigeo et al, Matsuno recite the same composition disclosed for the recording media and calendering process steps subsequent to coating for smoothing layers in the manufacture of recording media. While not teaching control of concavities in

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the magnetic layer it would have been expected to receive the same concavity results as a matter of routine optimization since as previously pointed out there is a recognition in the art of reducing unevenness and increase the smoothness of the magnetic layer. The difference between what has been claimed and the **Lowery et al**, **Katsutoshi et al**, **Shigeo et al**, **Matsuno** teachings would have been merely be a matter of routine optimization in measuring concavity concentration - as noted in the previous Office Action: "[T]he discovery of a previously unappreciated property of a prior art composition, . . . , does not render the patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947

#### Reply to Applicant's arguments

- 2. Applicant's arguments filed 11/09/05 and Supplemental Amendment 1/03/06 have been fully considered but they have not been found persuasive for the rejection of claims 1 to 8 under 35 U.S.C. 103(a) as obvious over any of: Lowery et al, Katsutoshi et al, Shigeo et al, Matsuno.
- 3. As pointed out in the previous Office action Lowery et al, Katsutoshi et al,
  Shigeo et al, and Matsuno all teach minimizing the concavities in the magnetic layer by
  an appreciation for optimizing evenness and smoothness of the magnetic layer through
  taking steps to even the layer. Evening and smoothing inherently mean removal of the
  unevenness such as a cavity in the surface, though not measured the of extent of
  concavity concentration at the surface would have been a matter of routine optimization

given the appreciation in the art for their removal and the teaching of calendering to remove them - see **Lowery et al** col. 9 lns 10-15; **Katsutoshi et al**, teaching increase smoothness as a matter of extent desired by super calendering (e.g., Example 1 paragraph [0043]); **Shigeo et al** showing calendering after desiccation for decreasing in surface roughness *Ra*, and **Matsuno** teaching increasing smoothness through supercalendering in the paragraph bridging pages 22 and 23. As noted in the previous Office Action: "[T]he discovery of a previously unappreciated property of a prior art composition, . . . , does not render the patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947.

4. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As regard claim 9 this claim further limits the article by positively including the process steps for the article that has been shown to render a decrease the error rate of the resulting media when made by the step of drying and electron beam curing of the non-magnetic coating prior to the step of forming the upper magnetic layer on the non-magnetic layer and drying the upper magnetic layer prior to applying the back coat layer. This sequence of steps including electron beam curing of the non-magnetic coating prior to forming the upper magnetic layer on the non-magnetic layer is not fairly suggested in the art when, as in the instant case, applicants have demonstrated

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this sequence of steps, preferred in the instant disclosure page 44 last complete paragraph associated with the level of concavities, provides an unobvious improvement in error rate of the magnetic media evident from instant examples 1-5.

#### **CONCLUSION**

The claims are 1 to 9.

- Claims are 1 to 8 have been rejected as unpatentable.
- Claim 9 has been objected to dependant on rejected claim 1.

### **INQUIRES**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis Falasco, PhD whose telephone number is (571)272-1507. The examiner can normally be reached on M-F 10:30 - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol D. Chaney, PhD can be reached at (571)272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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ZK

LF 03/06

CAROL CHANEY
SUPERVISORY PATENT EXAMINER